

A device characterized by an insulating device being planned that is designed in such a way that a heat flow in a radial direction vertical to the rotation axis (M) of the furnace (1) can be restricted to a preset rate and whereby the insulating device (6) is designed so that its insulating effect is reduced from the cover heater (3) to the floor heater (2) is familiar from the Journal of Crystal Growth, NL, North-Holland Publishing Co. Amsterdam, Vol. 166, No. ¼, September 1, 1996, pages 566-571.

Page 2, paragraph 6: please rewrite as follows:

The task is solved by means of a device for producing a monocrystal by growing from a melt of raw materials of the monocrystal to be produced with a heating appliance (1) for generating a temperature gradient within the melt of raw material whereby the heating appliance (1) has a rotationally symmetrical furnace (1) with a rotation axis (M) and with an essentially level floor heater (2) and an essentially level cover heater (3) that can be controlled to different temperatures and characterized by an insulating device being planned that is designed in such a way that a heat flow in a radial direction vertical to the rotation axis (M) of the furnace (1) can be restricted to a preset rate and whereby the insulating device (6) is designed so that its insulating effect is reduced from the cover heater (3) to the floor heater (2).

Page 2, paragraph 7: please rewrite as follows:

In certain preferred embodiments of the invention, the device has a furnace designed cylindrically and a controller that is designed in such a way that the temperature of the floor heater (2) can be reduced in comparison with the temperature of the cover

heater. In other preferred embodiments, the device has an insulator device (6) that is designed as a tapered cone body with a coaxial cylindrical hollow space that is open at the top and bottom and placed in the furnace (1) in such a way that the tapered end is towards the floor heater (2). Preferably, the insulator device is made, for example, of graphite. In other preferred embodiments, the device comprises a furnace (1) having a jacket heater (5). In still other preferred embodiments, the device comprises a heat transmission part (6) having a rotationally symmetrical profiled or unprofiled shape. In yet other preferred embodiments, the device includes a heating surface of the heaters being calculated in a ratio to the diameter of the monocrystal to be produced so that a temperature that is essentially homogeneous over the radial cross-section surface of the monocrystal to be produced can be generated together with a temperature gradient between the first heater (2) and the second heater (3) that is essentially homogeneous and constant. Preferably, the size of the surface of each heater (2, 3) is at least 1.5 times the cross-sectional area of the monocrystal to be produced is calculated. Preferably, the controller is designed so that the temperature of the first level heater (2) can be lowered continuously as against the second level heater (3). In still other preferred embodiments, the clearance between the heaters is greater than the length of the monocrystal to be produced. In yet further preferred embodiments, a crucible (4) for receiving a melt of raw material of the monocrystal to be produced is provided between the first heater (2) and the second heater (3). Preferred devices of the present invention are particularly suited for the production of a monocrystal from a III-V composite semiconductor, for example, a monocrystal of gallium arsenide.